AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the claims:

Claim 1 (canceled)

Claim 2 (currently amended): A method for enhancing the function of normal or abnormal excitable tissue in a mammal comprising administering peripherally to said mammal a peripherally effective, non-toxic, excitable tissue enhancing amount of recombinant EPO, The method of Claim 1 wherein said enhancing the function of excitable tissue results in the enhancement of associative learning or memory.

Claim 3 (currently amended): A method for enhancing the function of normal or abnormal excitable tissue in a mammal comprising administering peripherally to said mammal a peripherally effective, non-toxic, excitable tissue enhancing amount of recombinant EPO, The method of Claim 1 wherein said enhancing the function of excitable tissue is used in the treatment of cognitive dysfunction.

Claim 4 (currently amended): A method for enhancing the function of normal or abnormal excitable tissue in a mammal comprising administering peripherally to said mammal a peripherally effective, non-toxic, excitable tissue enhancing amount of recombinant EPO, The method of Claim 1 wherein said excitable tissue is central nervous system tissue or peripheral nervous system tissue.

Claim 5 (currently amended): A method for enhancing the function of normal or abnormal excitable tissue in a mammal comprising administering peripherally to said mammal a peripherally effective, non-toxic, excitable tissue enhancing amount of recombinant EPO, wherein said administration comprises oral, topical, intraluminal or by inhalation or parenteral administration.

Claim 6 (original): The method of Claim 5 wherein said parenteral administration is intravenous.

Claim 7 (currently amended): A method for enhancing the function of normal or abnormal excitable tissue in a mammal comprising administering peripherally to said mammal a peripherally effective, non-toxic, excitable tissue enhancing amount of recombinant EPO, The method of Claim 1 wherein said administration is acute or chronic.

Claim 8 (cancelled)

Claim 9 (currently amended): A method for enhancing the function of normal or abnormal excitable tissue in a mammal comprising administering peripherally to said mammal a peripherally effective, non-toxic, excitable tissue enhancing amount of recombinant EPO, The method of Claim 1 wherein said EPO is administered at a dose greater than the dose necessary to maximally stimulate erythropoiesis.

Claim 10 (cancelled)

Claim 11 (cancelled)